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Ashland Aqualon Functional Ingredients

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August 19, 2009

Hand Delivered

Mr. Jeremy Kazio
Permit Writer
Department of Environmental Quality
4949-A Cox Road
Glen Allen, Virginia 23060-6295

Dear Mr. Kazio:

VPDES PERMIT VA0003492
APPLICATION FOR REISSUANCE

Enclosed are EPA General Form 1, Form 2C, and Form 2F for the permitted outfalls at Hercules Incorporated, Hopewell, Virginia. Also enclosed are the following:

- Figure A: Location Map
- Figure B: Line Drawings for Form 2C Item II-A and Form 2C - Item II-A and II-B Flow Notes
- Enclosure 1 - Form 2C Item IV-A and Form 2F Item II-B - Fact Sheet December 2008
- Enclosure 2 - Form 2C Item IV-B and Form 2F Item II-B - Zinc Source / Minimization Summary
- Enclosure 3 - Form 2C Item IV-B and Form 2F Item II-B - Copper Source / Minimization Summary
- Enclosure 4 - Form 2 C Item V - Data Notes
- Enclosure 5 - Form 2F Item I - Outfall Locations
- Enclosure 6 - Form 2F Item IV A, B, C - Drainage Areas, Pollutant Sources, Control Measures
- Enclosure 7 - Form 2F Item V-B
- Enclosure 8 - Form 2F Item VII Data Notes/Sampling Logic
- Enclosure 9 - Site Map #1 Storm Drainage System (Form 2F Item III requirement)
- Enclosure 10 - Site Map #2 Significant Materials Management (Form 2F Item III requirement)
- Enclosure 11 - Permit fee form and a copy of the fee check submitted with the 2009 permit application

Per our discussions concerning re-issuance of the referenced permit, Hercules does hereby request your consideration of the following issues:

1) Remove monitoring requirements at Outfall 013 since there are no longer discharges. There have been no discharges during the last two permitting periods - including Hurricanes Floyd and Isabel, as well as Tropical Storm Gaston. This is likely due to the fact the drainage area vegetation has improved; thereby reducing runoff. Continued maintenance of the sampling station that is no longer used (for lack of sampling events) is hazardous because of uneven rocky slopes that are well vegetated.

2) Remove the requirement to test propylene oxide (PO) at 905 and 906. It is not unloaded, stored, or used in the 905 drainage area. The storage tank is in the 905 drainage area. The dike is > 110% the volume of the tank. Rainwater is retained in a dike. When the PO dike is drained, water is first tested for PO at that time, and the draining of the dike recorded as provided in Sec 3.2 of the Surface Water Protection Plan. In the unlikely event that PO would be present, the dike contents would be pumped to the industrial sewer. Good SWP provisions preclude the need for other testing. PO has always tested Nil in the stormwater samples.

3) Replace any COD monitoring requirements with TOC. COD is basically an indicator for setting up BOD. TOC is more current technology than COD/BOD. TOC data for our outfalls is provided for consideration. We are able to determine TOC (informally) onsite. If problems are noted with this organic loading parameter, sourcing the problem works better with TOC than with the less specific COD test. It takes at least a week to get COD results back from contract labs. In the larger picture, we don't like the fact that COD test requires generation of listed hazardous wastes. TOC is a catalytic test that generates less waste of consequence.

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4) Remove monitoring requirements at the internal Outfall 601 that is part of Outfall 906 discharge. As part of 006 discharge, 601 is substantially identical as 906. This internal outfall is a collection basin from which dry weather flow is pumped to our industrial wastewater system. We had previously requested removal of 601 monitoring requirements, but DEQ indicated interest in knowing what 601 characteristics affect 906 discharge. The current 1/6 Mo permit requirement is to sample 601 "concurrently with stormwater samples for Outfall 906." This is logically accomplished by sampling upstream (601) first and then going downstream and catching the 906 sample as the same 601 water is passing there. However, 601 usually discharges after about ≥ 0.5" of rain. Thus, the 906 sampling must occur later in the event rather than as-soon-as-practical after 0.1" of rainfall. Hercules believes that if/when analysis of 601 or other waters flowing to 906 are needed to address a 906 concern, the permittee should determine what testing or other measures are needed. The Copper Source Minimization Summary referenced in Permit Application 2C-IV.B and 2F-II.B is a good example of Hercules considering a variety of sources and addressing copper at 906. An active Surface Water Protection Plan should minimize pollution and pollution-related requirements.

5) A considerable amount of acidic influent (with dissolved metals) including zinc has been entering our 005/905 drainage system likely in the vicinity of a manhole on the north (upgradient) boundary of our site. (Reference Intake 007 Site Map #1 Storm Drainage System). As long as we can remember, there has been storage of typically 50-100 coal and/or molten sulfur cars on the neighboring rail yard site, and there is visual evidence of release (small to fist-sized) chunks of solidified sulfur). We are currently adding lime to 005/905 sewer to neutralize the influent and minimize the potential for < 5 pH at the outfall. As we work with the adjoining owners, we request forbearance so far as pH, dissolved metals, and toxicity at 005 are concerned. Otherwise, we request DEQ take whatever steps are needed to require the adjoining owner to no longer allow acidic groundwater contamination to flow onto our site or into 005/905 storm sewer system. Our effort to minimize zinc, acidity, and related problems have been reported in quarterly DMR summaries and is reported in more detail in the Zinc Source Minimization Summary referenced in Forms 2C Item IV.B and 2F Item II.B.

6) During and following your visit on August 11, we discussed removing the requirement to pump 001 dry weather flow to 006 ditch because the 001 water has not been exposed to industrial activity for close to 20 years. You replied "... Also, considering the history of the site, groundwater contamination is a potential, especially without the benefit of dilution from stormwater collection. I think that it may be possible to eliminate the dry weather requirements if a study is done showing that there is no potential for pollution from contaminated groundwater. Perhaps the next cycle would be the best time to consider this possibility. As of now, I don't think that you could collect enough data to prove otherwise for this go 'round." Hercules agrees with this approach, and we plan to continue pumping dry weather flow.

7) Over some years, we have mentioned several times that we are aware that Outfalls 005 and 006 (905 and 906) discharge into a creek made swampy by numerous beaver dams and whose DO is < 3.0 mg/L much of the time. We believe the oxygenation requirement of our permit expends electricity to counter natural conditions, and we would like the need for oxygenation to be re-evaluated. While we recognize such evaluation may not be practical for this permit issuance, we believe it should be done at some point because the oxygenation generates carbon footprint possibly to the detriment of a natural condition.

A final note -- our letterhead indicates Ashland; however, Hercules Incorporated still exists and all our permits are maintained by Hercules Incorporated. All Hercules stock was purchased from public shareholders in November 2007, as previously communicated to regulatory agencies including the DEQ.

Thank you for your thoughtful guidance with the permit application. If you require additional information or would like to schedule a meeting, you may contact me at beperkinson@ashland.com or at (804) 541-4390.

Very truly yours,

William E. Perkinson
Environmental Engineer

WEP:lbr
Enclosures
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